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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,871	06/27/2003	Lawrence W. McVoy	BIT 63186	7091
7590	02/28/2006		EXAMINER	
Benjamin T. Queen, II Pietragallo, Bosick & Gordon One Oxford Centre 301 Grant Street, 38th Floor Pittsburgh, PA 15219			HWANG, JOON H	
			ART UNIT	PAPER NUMBER
			2166	
DATE MAILED: 02/28/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/607,871	MCVOY ET AL.	
	Examiner	Art Unit	
	Joon H. Hwang	2166	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 27 June 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-35 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/10/03.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____

DETAILED ACTION

1. The pending claims are 1-35.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-2, 4-9, 11, 15-16, 18-23, 25-26, and 33-34 are rejected under 35 U.S.C. 102(e) as being anticipated by Arun et al. (U.S. Patent No. 6,631,386).

With respect to claim 1, Arun teaches providing a version control system on the computer (fig. 1). Arun teaches creating within the version control system an associative array comprising a collection of keys and corresponding values (i.e., a record with a version control, fig. 2, lines 32-58 in col. 1, and lines 49-67 in col. 4). Arun teaches applying a version control operation to the associative array to version control the collection of keys and corresponding values (i.e., a record-by-record basis version control, lines 1-25 in col. 5, lines 48-67 in col. 25, and fig. 2).

With respect to claim 2, Arun teaches the version control operation includes at least one of add, create, edit, remove, modify, delete, commit, merge, rollback, query, delta, or annotate (fig. 4).

With respect to claim 4, Arun teaches viewing an associative array as a database record (fig. 2 and lines 49-67 in col. 4).

With respect to claim 5, Arun teaches organizing a collection of associative arrays as a database table (fig. 2 and lines 49-67 in col. 4).

With respect to claim 6, Arun teaches a specification file which defines at least one of table characteristics default value or constraints on allowable values (i.e., a default value in a field of a table, lines 16-27 in col. 6).

With respect to claim 7, Arun teaches organizing a collection of database tables as a database (fig. 1, fig. 2, and lines 49-67 in col. 4).

With respect to claim 8, Arun teaches applying a version control operation to the collection of associative arrays (i.e., a table-by-table basis version control, lines 48-67 in col. 25 and lines 24-53 in col. 13).

With respect to claim 9, Arun teaches the version control operation includes at least one of add, create, edit, remove, modify, delete, commit, merge, rollback, query, delta, or annotate (fig. 4).

With respect to claim 11, Arun teaches structuring and arranging for peer to peer communication (lines 52-67 in col. 26 and lines 20-54 in col. 2).

With respect to claim 15, Arun teaches manually resolving a selected conflict occurring in the keys by evaluating historical values of the keys containing the conflict (fig. 6).

With respect to claim 16, Arun teaches version controlling a database containing the associative array (lines 48-67 in col. 25 and lines 24-53 in col. 13).

With respect to claim 18, Arun teaches creating within the version control system a plurality of associative arrays (fig. 2, lines 32-58 in col. 1, and lines 49-67 in col. 4).

With respect to claim 19, Arun teaches replicating the plurality of associative arrays (i.e., synchronization of records, fig. 2, line 59 in col. 17 thru line 27 in col. 18). Arun teaches editing at least one of the plurality of associative arrays (fig. 4). Arun teaches committing the edited and unedited plurality of associative arrays back to the version control system (fig. 5).

With respect to claim 20, Arun teaches version controlling the plurality of associative arrays in original form prior to the editing of at least one of the plurality of associative arrays (fig. 5).

With respect to claim 21, Arun teaches version controlling the edited and unedited plurality of associative arrays following the committing of the edited and unedited plurality of associative arrays back to the version control system (fig. 5).

The limitations of claims 22, 25, and 33 are rejected in the analysis of claim 1 above, and these claims are rejected on that basis.

The limitations of claims 23, 26, and 34 are rejected in the analysis of claim 5 above, and these claims are rejected on that basis.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3, 10, 12-14, 17, 24, 27-32, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arun et al. (U.S. Patent No. 6,631,386) in view of Boothby (U.S. Patent No. 5,684,990).

With respect to claim 3, Arun discloses the claimed subject matter as discussed above except structuring the associative array as a single file. However, Boothby teaches structuring the associative array as a single file (i.e., a file record, abstract and lines 46-57 in col. 5) in order to organize record data. Therefore, based on Arun in view of Boothby, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Boothby to the system of Arun in order to organize record data.

With respect to claim 10, Arun discloses the claimed subject matter as discussed above except replicating at least a portion of the version control system. However, Boothby teaches replicating at least a portion of the version control system (i.e., synchronization of two different database versions from two different systems, fig. 3) in order to maintain two systems synchronized. Therefore, based on Arun in view of Boothby, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Boothby to the system of Arun in order to maintain two systems synchronized.

With respect to claim 12, Arun discloses the claimed subject matter as discussed above except generating a report combining the associative array with other data and/or meta data contained within the version control system. However, Boothby teaches

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generating a report combining the associative array with other data and/or meta data contained within the version control system (i.e., generating a status file, fig. 2 and lines 32-45 in col. 5) in order to synchronize data in two systems. Therefore, based on Arun in view of Boothby, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Boothby to the system of Arun in order to synchronize data in two systems.

With respect to claim 13, Arun discloses the claimed subject matter as discussed above except automatically resolving a selected conflict occurring in the values of the associative array. However, Boothby teaches automatically resolving a selected conflict occurring in the values of the associative array (i.e., resolving a conflict by automatic rules, table 1 in cols. 7-8) in order to synchronize data in two systems. Therefore, based on Arun in view of Boothby, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Boothby to the system of Arun in order to synchronize data in two systems.

With respect to claim 14, Arun discloses the claimed subject matter as discussed above except automatically resolving a selected conflict, using a merge algorithm having knowledge of the data, occurring in the values of the associative array. However, Boothby teaches automatically resolving a selected conflict, using a merge algorithm having knowledge of the data, occurring in the values of the associative array (i.e., resolving a conflict by automatic rules, table 1 in cols. 7-8) in order to synchronize data in two systems. Therefore, based on Arun in view of Boothby, it would have been obvious to one having ordinary skill in the art at the time the invention was made to

utilize the teaching of Boothby to the system of Arun in order to synchronize data in two systems.

With respect to claim 17, Arun discloses the claimed subject matter as discussed above except utilizing replicated repositories of the version control system. However, Boothby teaches the version controlling of the database is performed utilizing replicated repositories of the version control system (i.e., a status file, table 1 in cols. 7-8 and fig. 6) in order to synchronize data in two systems. Therefore, based on Arun in view of Boothby, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Boothby to the system of Arun in order to synchronize data in two systems.

With respect to claim 24, Arun discloses the claimed subject matter as discussed above except operating the version control system within a peer-to-peer replicated network with another version control system. However, Boothby teaches operating the version control system within a peer-to-peer replicated network with another version control system (abstract, fig. 1, fig. 2, and line 16 in col. 3 thru line 5 in col. 4) in order to synchronize data in two systems. Therefore, based on Arun in view of Boothby, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Boothby to the system of Arun in order to synchronize data in two systems.

The limitations of claims 27 and 35 are rejected in the analysis of claim 24 above, and these claims are rejected on that basis.

With respect to claim 28, Arun teaches a user computer comprising: a version control system accessible by the user computer (fig. 1); means for creating within the version control system an associative array (i.e., a record with a version control, fig. 2, lines 32-58 in col. 1, and lines 49-67 in col. 4); and means for applying a version control operation to the associative array (i.e., a record-by-record basis version control, lines 1-25 in col. 5, lines 48-67 in col. 25, and fig. 2). Arun discloses a collaboration environment where each user may have a working copy (lines 10-34 in col. 14 and lines 20-54 in col. 2). Arun does not explicitly disclose a second user computer networked with the first user computer in a peer-to-peer replicated environment. However, Boothby teaches a second user computer networked with the first user computer, each of the first user computer and the second user computer capable of operating independently in a peer-to-peer replicated environment (abstract, fig. 1, fig. 2, and line 16 in col. 3 thru line 5 in col. 4) in order to synchronize data in two systems. Therefore, based on Arun in view of Boothby, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Boothby to the system of Arun in order to synchronize data in two systems.

With respect to claim 29, Arun discloses the claimed subject matter as discussed above except merging an edit made within the first version control system into the second version control system and vice-versa. However, Boothby teaches merging an edit made within the first version control system into the second version control system and vice-versa (table 1 in cols. 7-8). Therefore, the limitations of claim 29 are rejected in the analysis of claim 28 above, and the claim is rejected on that basis.

With respect to claim 30, Arun discloses the claimed subject matter as discussed above except resolving a conflict that results from an edit made within either the first version control system or the second version control system. However, Boothby teaches resolving a conflict that results from an edit made within either the first version control system or the second version control system (table 1 in cols. 7-8). Therefore, the limitations of claim 30 are rejected in the analysis of claim 28 above, and the claim is rejected on that basis.

With respect to claim 31, Arun teaches organizing a collection of associative arrays as a database table in the version control system (fig. 2 and lines 49-67 in col. 4).

The limitations of claim 32 are rejected in the analysis of claim 31 above, and the claim is rejected on that basis.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joon H. Hwang whose telephone number is 571-272-4036. The examiner can normally be reached on 9:30-6:00(M~F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joon Hwang
Patent Examiner
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2/21/06